

## CLAIMS

1. A cold die steel excellent in characteristics of suppressing dimensional change, including, by mass%,  
carbon (C): 0.7% or more and less than 1.6%,  
silicon (Si): 0.5 to 3.0%,  
manganese (Mn): 0.1 to 3.0%,  
phosphor (P): less than 0.05% including 0%,  
sulfur (S): 0.01 to 0.12%,  
chromium (Cr): 7.0 to 13.0%,  
one or two elements selected from the group consisting of molybdenum (Mo) and tungsten (W): amounts satisfying the formula:  $(Mo + (W/2)) = 0.5$  to 1.7%,  
vanadium (V): less than 0.7% including 0%,  
nickel (Ni): 0.3 to 1.5%,  
copper (Cu): 0.1 to 1.0%, and  
aluminum (Al): 0.1 to 0.7%.
2. The cold die steel according to claim 1, wherein amounts of nickel and aluminum satisfy the formula by mass%:  $Ni/Al = 1$  to 3.7.
3. The cold die steel according to claim 1, wherein amounts of chromium and carbon satisfy the formulas by mass%:  $(Cr - 4.2 \times C) = 5$  or less, and  $(Cr - 6.3 \times C) = 1.4$  or more.
4. The cold die steel according to claim 1, wherein the steel further includes, by mass%, 0.3% or less excluding 0% of columbium (Nb).
5. A cold die steel excellent in characteristics of suppressing dimensional change including, by mass%,

carbon (C): 0.7% or more and less than 1.6%,  
silicon (Si): 0.5 to 3.0%,  
manganese (Mn): 0.1 to 3.0%,  
phosphor (P): less than 0.05% including 0%,  
sulfur (S): 0.01 to 0.12%,  
chromium (Cr): 7.0 to 13.0%,

one or two elements selected from the group  
consisting of molybdenum (Mo) and tungsten (W): amounts  
satisfying the formula:  $(\text{Mo} + (\text{W}/2)) = 0.5$  to 1.7%,

vanadium (V): less than 0.7% including 0%,  
nickel (Ni): 0.3 to 1.5%,  
cupper (Cu): 0.1 to 1.0%,  
aluminum (Al): 0.1 to 0.7%, and  
columbium (Nb): 0.3% or less excluding 0%,  
wherein amounts of nickel and aluminum

satisfy the formula:  $\text{Ni}/\text{Al} = 1$  to 3.7, and

wherein amounts of chromium and carbon  
satisfy the formulas:  $(\text{Cr} - 4.2 \times \text{C}) = 5$  or less, and  
 $(\text{Cr} - 6.3 \times \text{C}) = 1.4$  or more.